

TIMOFEYEVA, A.N.

Case of death during an attack of bronchial asthma. Sov. med.
24 no. 10:113-114 0 '60. (MIRA 13:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy
pomoshchi imeni I.I. Dzhanelidze.
(ASTHMA) (DEATH)

TIMOFEEVA, A.N.; SIKURKO, Ye.D.; UDAL'TSOVA, M.S.

Listerellal psychosis. Zh. nevropat. psikiat., Moskva 53 no.8:625--
631 Aug 1953. (CIML 25:4)

1. Department of Psychiatry of the State Order of Lenin Institute for
the Advanced Training of Physicians imeni S. M. Kirov.

TIMOFEYeva, A. N.

"Dinamika i Osobennosti Bezuslovnykh Sosudistykh Reflektov Pri Maniakal'noy i
Depressivnoy Fazakh Maniakal'no-Depressivnogo Psikhoza." p. 198

"O Psikhozakh Pri Listerelleznoy Infektsii," p. 208

Psikhiatricheskaya klinika i problemy patologii vysshey nervnoy deyatel'nosti.
Sbornik trudov Kafedry psikhiatrii., Leningrad. 1957. vol. 2.
resp. ed. I.F. SLUCHEVSKIY.

Chair of Psychiatry.
Leningrad State Inst. Advanced Training of Physicians.

TIMOFEYEVA, A.N.; SHKURKO, Ye.D.; UDAL'TSOVA, M.S.

Listerellal psychosis. Zhur.nevr.i psikh. 53 no.8:625-631 Ag '53.
(MIRA 6:9)

1. Kafedra psikhiatrii Gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey im.S.M.Kirova. (Psychoses) (Listerellosis)

TIMOFEEVA, A. N.

TIMOFEEVA, A. N.: "Clinical symptoms of manic-depressive psychosis and their pathogenetic and pathophysiological bases." Leningrad State Order of Lenin Inst for the Advanced Training of Physicians imeni S. M. Kirov. Leningrad, 1956. (Dissertation For the Degree of Candidate in Medical Sciences.)

Knizhnaya letopis', No. 39, 1956. Moscow.

TIMOFEYeva, A.N.; ZAMAKHOVER, Sh.M.

Clinical and pathophysiological study on the effect of small doses of barbamyd in depressive patients. Vop. psikh. nevr. no.10:327-338 '64. (MIRA 18:12)

1. Institut fiziologii imeni I. P. Pavlova AN SSSR, Laboratoriya patologii vysshey nervnoy deyatel'nosti cheloveka (zav. - prof. V.I. Butorin).

TIMOFEEVA A. P.

Identification of wheat seed by a laboratory method.
A. P. Timofeeva and S. I. Zavylnikova. *Bull. Acad. Sci. USSR Div. Biol. Sci. Ser. IV, No. 1, 5-22* (in English 22-3) (1960). -- All types of wheat may be divided into two groups with reference to developing a light or dark color when treated with phenol. For hard wheat a 1% soln. is used. One drop of NH_4OH is added for each cc. of the soln. After 1 hour the color develops. For winter and light-colored wheats a 0.5% soln. with $\frac{1}{2}$ of NH_4OH is sufficient. For red wheat 0.1% solution of phenol with one drop of NH_4OH for every 2 cc. is sufficient.
J. S. Joffe

J. S. Joffe

A 32.12.4 METALLURGICAL LITERATURE CLASSIFICATION

CIA-RDP86-00513R001755720014-9"

TIMOFEYEVA, A.P.

GORNAK, K.A.; TIMOFEYEVA, A.P.; SHTYREN, M.Ya. (Moskva)

Malignant adenomatosis of the lungs. Klin. Med. 32 no.6:66-74 Je '54.
(MLRA 7:8)

1. Iz patologoanatomicheskogo otdeleniya (zav.-deystvitel'nyy chlen
AMN SSSR zasluzhennyy deyatel' nauki prof. I.V.Davydovskiy) bol'ni-
tsy imeni Medsantrud, 1-y Gorodskoy i 4-y Gorodskoy klinicheskikh
bol'nits.

(LUNGS,

*carcinoma, alveolar)

TIMOFEYeva, A. S.

Development of the twilight state of consciousness in excretory urography. Urologiia no.3:52-53 '61. (MIRA 14:12)

1. Iz kafedry psikhatrii (zav. - prof. M. A. Gol'denberg)
Novosibirskogo meditsinskogo instituta.

(URINARY ORGANS—RADIOGRAPHY)
(SKIODAN—TOXICOLOGY)

TIMOFEYeva, A. S., assistant

Activity of cholinesterase in the blood in acrichine "psychosis"
in animals. Trudy Novosib. gos. med. inst. 37:145-150 '61.
(MIRA 15:6)

(QUINACRINE--TOXICOLOGY) (CHOLINESTERASES)
(PSYCHOSES)

GOL'DENBERG, M. A., prof.; PRILENSKIY, Yu. F., assistant; KOROLENKO,
TS. P., assistant; TIMOFEYEVA, A. S., assistant

Some problems of somatic disorders and of the pathogenesis of
acrichine "psychosis" in animals. Trudy Novosib. gos. med. inst.
37:203-219 '61. (MIRA 15:6)

(PSYCHOSES) (QUINACRINE—TOXICOLOGY)

TIMOFEYeva, A. S., assistant; KOROLENKO, TS. P., assistant

Materials on the characteristics of higher nervous activity in
acrichine "psychosis" in animals. Trudy Novosib. gos. med. inst.
37:109-117 '61. (MIRA 15:6)

(NERVOUS SYSTEM) (PSYCHOSES)
(QUINACRINE—TOXICOLOGY)

TIMOFEYeva, A. S., assistant

Calcium content in the blood in acrichine "psychosis" in animals.
Trudy Novosib. gos. med. inst. 37:154-157 '61. (MIRA 15:6)

(QUINACRINE--TOXICOLOGY) (PSYCHOSES)
(CALCIUM IN THE BODY)

TIMOFEEVA, A.S.

Work of the nurses council at the Imenskaya District Hospital.
Med.sestra 19 no.1244 Ja '60. (MIRA 13:5)
(IMENSKAYA DISTRICT--NURSES AND NURSING)

TIMOFEEVA, A. V.
V. M. CHULANOVSKII, IAN/Ser Fiz, 12, 628-35(1948)

TIMOFEYEVA, A.V. AND FRIM, S.E.

Course in General Physics, Part II, Ed. 4-e, GITTL (1952) p. 145

TIMOFEYeva, A.V.; POPOVA, O.V.

Application of chemistry in footwear manufacture. Kozh.-obuv.
prom. 6 no.5:13-14 My '64. (MIRA 17:12)

TIMOFEYEVA, A.P.

DAVYDOVSKIY, I.V., professor; TIMOFEYEVA, A.P.

Report on one hundred clinical and anatomical conferences of the
pathoanatomical section of "Medsantrud" Hospital and the Department
of Pathoanatomy of the Second Moscow (Stalin) Medical Institute.
Ark.h.pat. 19 no.4:66-84 '57. (MLBA 10:6)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Davydovskiy)
(ANATOMY, PATHOLOGICAL)

DNEPROVSKAYA, I. A., SAMARSKIY, V. I. and TIMOFEEVA, E. A.

"Loudspeakers for Reproduction of High Audio Frequencies."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - ⁷2 Jun 58.

Timofeyeva, E. A.

USSR/ Chemistry - Catalytic conversion

Card 1/2 Pub. 40 - 18/27

Authors : Timofeyeva, E. A., and Shuykin, N. I.

Title : Conversions of individual hydrocarbons in contact with natural aluminum silicates. Part 2

Periodical : Izv. AN SSSR. Otd. khim. nauk 6, 1075-1081, Nov-Dec 1954

Abstract : Studies were made to determine the conversions of cyclohexane, methylcyclohexane and toluene over activated Troshkovsk clay (Al_2SiO_3) at 450 and 500°. It is shown that the degree of cyclane conversion increases with the increase in the molecular weight. Benzene and its homologues, as well as methylcyclopentane and unsaturated hydrocarbons were found among the cyclohexane conversion products.

Institution : Acad. of Sc., USSR, The N. D. Zelinskiy Institute of Org. Chemistry

Submitted : January 22, 1954

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9"

shaped, exhibiting irreversible hysterisis with H₂O vapor "

10-11-11

TIMOFEEVA, D. P.

M. M. DUBININ, ZhFKh, 23, 1129-40(1949)

can

Azotobacter as a source of nitrogenous nourishment for the higher plants. T. F. Denisovskaya and R. E. Timofeeva (comp. rend. acad. sci. U. R. S. S. R., 203 8(1967) (in English). —The action of N from azotobacter on the development of sugar beets was compared with that of org. N introduced in the form of asparagine (I) and urea (II) and also with that of N from NaNO_3 (III). Five kg. of abs. dry soil contg. KCl (0.75 g. of K_2O) and P (0.5 g. of P_2O_5) was treated with 1 g. of III or 60 cc. of azotobacter alime, resp., at pH 7.2, under favorable conditions of temp. and moisture. II gives better yields than I. N assimilated by azotobacter increases the yield of beets, especially when P K fertilizer is added to the soil. Introduction of carbohydrates did not increase the yield since the beets furnish the bacteria with enough energy-supplying matter. The greater the amt. of N in the soil the more N is absorbed during its vegetative life. Green house and field expts. were in good accord. Besides increasing the yield of beets, azotobacter promotes accumulation of sugar in the root and enriches the soil with N, thereby increasing the crop of the following year. The

role of straw as a source of carbohydrates for nodule bacteria. *Ibid.* 200 12(1967) (in English). Soybean and peas develop much more rapidly in soil inoculated with nodule bacteria than in sterile soil in the presence of carbohydrates. Best results were obtained from dextrin (I) (1 g. in 5 kg. of abs. dry soil). Sucrose (II) and glucose (III) gave nearly identical results. Carbohydrates in the presence of P K fertilizer invariably diminished the yield, since under the influence of the energizing matter the microflora vigorously develops and transforms the mobile substances into forms hard to assimilate. Both abs. and relative N contents in the overground and underground parts of the plants are increased by inoculation. The bacteria utilize III most productively, then I, then II. Chopped straw alone has a neg. reaction on the yield of soy and pea, owing partly to the denitrification it causes and partly to intensified reproduction of bacteria. In the presence of nodule bacteria, however, straw considerably increases the yield, also with P K fertilizer, owing to intensified reproduction of bacteria in the presence of carbohydrates formed in the decay of the straw. Quantity and wt. of nodules, the N content of the roots, seeds, straw and tubers, and the no. of seeds are increased by the introduction of straw and bacteria.

ASB S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND SQUARES										3RD AND 4TH SQUARES									
PROCESSING AND PROPERTY INDEX																			
<p>BC</p> <p style="text-align: right;">B-III-1</p> <p style="text-align: center;">Influence of nodule bacteria and <i>Azotobacter</i> on yield of leguminous and cereal plants grown together. T. T. DMITRIYENKO and E. E. TROFIMOVA (Compt. rend. Acad. Sci. U.S.S.R., 1967, 16, 231-233). -- When grown in mixed culture with peas, oats obtained from the activity of nodule bacteria. When the mixed crop is grown in soil inoculated with <i>Azotobacter</i> and nodule organisms, the growth of oats is improved and of peas depressed. A. G. P.</p>																			
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																			
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1ST AND 2ND SQUARES										3RD AND 4TH SQUARES									

BC

B-III-1

Role of straw as a source of carbohydrate for nodulus bacteria. T. T. DUDNIKOV and E. P. TIMOFEYEVA (Odesk. real. Acad. Sci. U.S.S.R., 1937, 16, 230-233).—Addition of chopped straw with an *Azotobacter*-free soil lowered the yields of soybean and peas as a result of denitrification and increased utilization of soil-N by bacteria. Similar treatment of soil inoculated with *Azotobacter* produced increased yields of the legumes, due to intensified fixation of N. Introduction of inoculated straw with P and K fertilizers further increased crop yields, the quantity and wt. of nodules, the N content of the plants, and the no. of seeds produced. A. G. P.

BLOKHIN, M.A.; TIMOFEYEV, E.V.; CHUKHLOV, G.Z.

Determining diffusion coefficients by means of secondary X-ray spectra. Izv.AN SSSR.Ser.fiz. 20 no.7:809-810 J1 '56. (MLRA 9:11)

1. Rostovskiy gosudarstvennyy universitet imeni V.M.Molotova.
(Diffusion) (X-ray spectroscopy)

TIMOFEEVA, E.Ye.; LYUVIGOV, R.B.; TSITSKHLADZE, T.V.

Measurement of thermal neutron fluxes in an IRT-2000 reactor.
Soob. AN Gruz. SSR 34 no.2:305-311 My '64. (MIRA 10:3)

TIMOFEEVA, F.A.

F 1972. COEFFICIENT OF HEAT EMISSION FROM A STREAM OF PARTICLES. Katsnel'son, B. D. and Timofeeva, F. A. (Kotloturbostroenie (Boiler and Turbine Manuf.), Sept.-Oct. 1948, (5), 16-22). The authors state that heat-exchange between a gas and particles plays an important part in industry and that there are adequate data for calculating this heat-exchange by convection under constant conditions. But that in many cases (e.g. the combustion of pulverised and liquid fuels) the process is so rapid that the temperature field in the boundary film around the particle does not have time to become stable. In such cases the coefficient of heat emission will not be constant, but will change its value in the course of time. In the majority of problems, where types of heat-exchange other than convection do not play an important part, by far the greatest intensity of heat exchange at the surface occurs at the start of the greatest intensity of heat exchange at the surface occurs at the start of the process. As the process continues the intensity will decrease gradually until it approximates to the value corresponding to constant conditions. In these cases, problems of varying exchange assume the chief significance. To investigate this type of exchange the authors made experiments, not

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

SUBJECT AREA	CLASSIFICATION	REMARKS
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100	101	102

with the exchange of heat from particles to a gas, but with the exchange of substance from solid particles to a liquid. They dropped spherical particles of sodium chloride into a column of water and measured the rate of dissolution. They varied conditions by altering the size of particles and the temperature of the water, and by dissolving glycerine in the water. From these experiments and from existing data they derive curves and equations giving relations between Nusselt, Prandtl and Reynolds values over a wide range both under constant and under varying conditions of exchange. (L).

TIMOFEYEVA, G.

Let's train convinced and devoted partisans of the cause of our party.
Prof.-tekh.obr. 20 no.11:18-21 N '63. (MIRA 17:1)

1. Zaveduyushchaya otделom shkol Moskovskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza.

SANKIN, N.; TIMOFEEVA, G.

Radio communication on one side band. Radio no.11:40-43 N '53.

(MIRA 6:11)

(Telephone, Wireless)

TIMOFEYEV, G.A., kand.med.nauk; BOGDANOVA, S.M.

Clinical laboratory characteristics of Salmonella infections
in children. Vop.okh.mat.i det. 8 no.3:40-46 Mr '63. (MIRA 16:5)

1. Iz kafedry infektsionnykh zabolevaniy u detey (zav. - prof.
A.T. Kuz'micheva) Leningradskogo pediatricheskogo meditsinskogo
instituta i Vasileostrovskoy detskoy infektsionnoy bol'nitsy
(glavnyy vrach - zasluzhennyy vrach RSFSR N.A. Nikitina).
(SALMONELLA INFECTIONS)

TIMOFEEVA, G.A.

Treatment of acute dysentery in children by rectal administration
of synthonysin (in suppositories). Vop.okh.mat. i det. 1 no.4:
92 J1-Ag '56. (MIRA 9:9)

1. Iz infektsionnogo otdela nauchno-issledovatel'skogo Leningradskogo
pediatricheskogo instituta i Detskoyinfektsionnoy bol'nitsy Sverdlov-
skogo rayona. Vop.okh.mat. i det. 1 no.4:92 J1-Ag '56. (MIRA 9:9)
(CHLOROMYCETIN) (DYSENTERY)

MOROZENKO, M.A.; BARYSHEVA, A.E.; TIMOFEYeva, G.A.; BYSTRYAKOVA, L.V.;
KALINNIKOVA, O.N.

Diagnostic value of the complement fixation reaction in viral
respiratory infections of infants. Acta virol. (Praha)[Eng] 7
no.6:534-541 '63.

1. Institute of Experimental Medicine, U.S.S.R. Academy of
Medical Sciences, and The Leningrad Institute of Pediatrics,
Leningrad U.S.S.R.

(COMPLEMENT FIXATION TESTS)
(RESPIRATORY TRACT INFECTIONS)
(INFLUENZA) (MYXOVIRUS INFECTIONS)
(ADENOVIRUS INFECTIONS) (ECHO VIRUSES)
(COXSACKIE VIRUS INFECTIONS)

2

CA

The two states of hydroperoxides of acids. Z. K. Malrus, G. Ya. Timofeeva, and N. M. Emanuel (Acad. Sci. U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 70, 655-7 (1950).—The existence of 2 forms of peroxides of AcOH , RiCO_2H , and PrCO_2H , indicated by the observation that cooling of AcH , RiCO_2H , or PrCO_2H , undergoing slow oxidation, results in inflammation well below the normal inflammability point, was demonstrated by further expts. An equimol. mixt. of AcH and O_2 , under the initial pressure of 100 mm. Hg, at 195° , was cooled rapidly to 72° , 77° , and 90° , at the point of min. of pressure; on subsequent heating, inflammation occurred only at 228° , 230° , and 253° , resp. However, after cooling down to room temp., inflammation occurred at as low as 203° . If, after cooling to room temp. ("quenching"), the reaction mixt. is first raised to 71° or 82° , it will ignite only above 260° , i.e. at a temp. close to the ignition temp. of the partly reacted but not "quenched" mixt. If the partly reacted, and then quenched mixt. is first kept a few min. at 180° , then cooled to room temp., and then heated, it ignites at 188° . These expts. are explainable by a reversibility of the transition between the 2 forms of acid peroxide: of these, the low-temp. form, obtainable either by "quenching" of the partly reacted mixt., or by mixing AcH , O_2 , and synthetic AcOH peroxide at room temp., has the property of igniting at a lower temp. The "quenched" peroxide is evidently converted into the less inflammable form, not instantaneously but at a definite rate. This conversion is readily brought about by heating the quenched reaction mixt. to a temp. well below the ignition temp. of the low-temp. form. Thus, a mixt. reacted up to the min. point, then quenched and subsequently heated to 130° , reacted further along practically the same slow change-of-pressure kinetic curve as an identical mixt. cooled directly to 130° without quenching.

N. Thon

TIMOFEEVA, G.A., kand.med.nauk

Agglutination reaction in patients with coli infection with special reference to age and clinical characteristics. *Pediatr* no.5:43-47 '61. (MIRA 14:5)

1. Iz kafedry infektsionnykh zabolevaniy u detey (zav. - dotsent A.T. Kuz'micheva) Leningradskogo pediatricheskogo meditsinskogo instituta (dir. - prof. N.T. Shutova) i detskoy infektsionnoy bol'nitsy Sverdlovskogo rayona Leningrada (glavnyy vrach - zaslu-zhennyy vrach RSFSR N.A. Nikitina, zav. laboratoriyey - kand. med.nauk V.A. Khrushchova). (ESCHERICHIA COLI) (BLOOD--AGGLUTINATION)

TIMOFEYEVA, G.A., kand.med.nauk; BOGDANOVA, S.M.; DANILOVA, V.A.;
LYUSTIGMAN, Ye.D.

Etiology and clinical aspects of gastrointestinal diseases in
children, especially infants. Sov. med. 25 no.2:42-46 F '62.
(MIRA 15:3)

1. Iz kafedry infektsionnykh zabolevaniy u detey (zav. kafedry -
dotsent A.T. Kuz'micheva) Leningradskogo pediatricheskogo meditsinskogo instituta (dir. - kand.med.nauk Ye.P. Semenova) i detskoy infektsionnoy bol'nitsy Sverdlovskogo rayona (glavnyy vrach - zasluzhennyy vrach RSFSR N.A. Nikitina).
(GASTROENTEROLOGY)

BYSTROVA, V.V., kand.med.nauk; TIMOFEYEVA, G.A., kand.med.nauk

Colimycin in the treatment of colienteritis in children.
Vop. okh. mat. i det. 5 no. 2:28-33 Mr-Apr '60. (MIRA 13:10)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov
(direktor - A.V. Loginov) i kafedry infektsionnykh zabolevaniy u
detey (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent
A.T. Kuz'micheva) Gosudarstvennogo pediatricheskogo meditsinskogo
instituta.

(INTESTINES—DISEASES) (ANTIBIOTICS)

1. MOFEEVIT, ST M.

EXCERPTA MEDICA Sec 7 Vol 13/7 Pediatrics July 50

1546. THE AGGLUTINATION REACTION IN THE TREATMENT OF DYSENTERY
IN CHILDREN WITH VARIOUS ANTIBIOTICS (Russian text) - Timofeeva
G. A. - VOPR. OKHR. MATER. I DETS. 1957, 3 (22-26)

Observations were made on 182 infants up to 9 years of age suffering from dysentery. Children treated with sulphonamides were used as a control group. The results of the investigation showed that in the group of children treated with tetracycline or streptomycin with ecmolin the percentage of positive reactions was lower than that in the sulphonamide-treated group, and low agglutination titres were generally found here. In the group of infants treated with synthomycin (chloramphenicol) no reduction in the number of positive reactions nor increase in the number of low titres was observed. In a group of infants in which antibiotic treatment was instituted at an early stage, lower agglutinin titres were found than in the group in which treatment began later (after the 4th-7th day), at a time when immunity might already be developing. A correlation is seen between immunogenesis and the age of the patient, the severity of the disease, the presence of intercurrent illness and of complications. With age, the percentage of reactions increases, the agglutination titre rises; the presence of other diseases or complications lowers the immunological reactivity; in severe forms of dysentery a maximum agglutination titre and a high percentage of positive reactions are generally found.

TIMOFEEVA, G.A., kandidat meditsinskikh nauk

Widal's test in dysenteric children treated with different antibiotics.
Vop.okh.mat.i det. 2 no.3:22 -26 My-Je '57. (MLRA 10:7)

1. Iz otdela detskikh infektsiy nauchno-issledovatel'skogo pediatriche-
skogo instituta (dir. - prof. A.L.Libov) i Detskoy infektsionnoy
bol'nitsy Sverdlovskogo rayona (glavnyy vrach N.A.Nikitina)
(DYSENTERY) (ANTIBIOTICS)

USSR/Physics - Electric arc *TIMOFEYEVA, G.G.* FD-1862

Card 1/1 Pub. 146-22/25

Author : Granovskiy, V. L., and Timofeyeva, G. G.

Title : Compression and bending of an arc in rarefied gas during great current strength

Periodical : Zhur. eksp. i teor. fiz. 28, 378, March 1955

Abstract : The authors experimented on arcs in rarefied vapors of mercury and inert gases in straight cylindrical tubes without constrictions at constant current direction. Measurements with a mobile probe in a tube with diameter 70 mm and Hg vapors at pressure 1 micron/Hg confirmed that at increase of current from 1 to 80 amperes the width of the column decreases by about 25%. A detailed description of these experiments is planned. Five references.

Institution: All-Union Electrotechnical Institute [All-Union Electrical Engineering Inst]

Submitted : November 30, 1954

Timofeyeva, G.G.

Category.: USSR/Electronics - Gas Discharge and Gas-discharge Instruments H-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4335

Author : Timofeyeva, G.G., Granovskiy, V.L.

Inst : All-Union Electrotechnical Institute

Title : Deformation of the Column of the Arc in a Rarefied Gas at Large Current

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 30, No 3, 475-487

Abstract : Arcs were investigated in mercury, hydrogen, argon, and krypton at pressures of approximately 10^{-4} -- 10^{-3} mm mercury and at currents i_a up to 200 amp. It was found that the half-width of the arc column in a tube with a radius $r = 30$ -- 35 mm at $p \sim 1$ micron mercury (mercury vapor) diminishes by 30% as the current grows to 170 amp. It was impossible to detect a further compression of the arc by increasing the current to 2,000 amp. owing to the occurrence of strong oscillations of the probe current, arc voltage, and arc current. The amplitude of the oscillations increases with increasing i_a and diminishes with p . The frequency of these oscillations is 10^4 -- 10^5 cycles, increasing with i_a and diminishing with increasing R and with increasing molecular weight of the gas. The oscillations result from

Card : 1/2

Category : USSR/Electronics - Gas Discharge and Gas-discharge Instruments

H-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4335

the disordered displacement of the string of the arc over the section of the tube. A compressed arc column was observed visually and photographed at short current pulses $i \sim 500$ -- 2,000 amp (during which the arc did not have time to shift, $\tau_a \sim 10^{-6}$ sec). The column of the arc compresses into a narrow string bent approximately in a helix that adheres to the walls of the tube. The compression of the column into a narrow string and its flexure into a helix are attributed to the electrodynamic action of the arcs own magnetic field, and its displacement is attributed to gas-dynamic action (local rarefaction of the gas in the channel of the arc). Bibliography, 23 titles.

Card : 2/2

Timofeyeva, G.G.

AUTHOR: Timofeyeva, G.G.,

57-11-33/33

TITLE: Pinch-Effect and the Arc Break in the Narrowed Part. (Pinch-effekt i obryv dugi v suzhenii.)

PERIODICAL: Zhurnal TekhnFiz., 1957, Vol 27, Nr 11, pp. 2669-2671 (USSR)

ABSTRACT: It was observed by the author that on the occasion of a further increase of the amperage after a break of current under certain circumstances a permanent current without breaks is flowing. It is assumed that the break of current by the strong electrodynamic compression of the arc in the narrowed part is prevented by its own magnetic field. In every moment the compressed arc-wire only occupies one part of the cross-section of the narrowed part and is displaced in the course of the dilution of gas in this part of the cross-section into the adjacent regions. Therefore the development of positive ions in the narrowed part of the tube does not stop and the double electric layer at the cathode side of the narrowed part, the electrical-optical influence of which guarantees, the penetration of the electron-current into the narrowed part, is continuously filled up by ions. The photography of the phenomenon of the arc at the narrowed part on the occasion of high amperages confirms this assumption. It is shown that the break of current only takes place, if the pinch effect current is higher than that of the break current. The highest possible break current is

Card 1/2

$I_{Abriss} \ll \frac{215 c^{4/3}}{a}$

Pinch-Effect and the Arc Break in the Narrowed Part.

57-11-33/33

a-proportionality coefficient which for each gas is determined by experiment. c - relation of the radius of the narrowed part to the radius of the wire.
There are 2 Slavic references.

ASSOCIATION: Institute for Electrotechnics im. V.I. Lenin, Moscow
kiy institut im.V.I.Lenina, Moskva) (Elektrotekhniches-

SUBMITTED: April 28, 1957

AVAILABLE: Library of Congress.

Card 2/2

TIMOTIEVA, G.G., Cand Phys-Math Sci—(diss) "Peculiarities of the
positive arc column in rarified gas at ~~high~~^{large} currents"
Mos, 1958. 10 pp (Main Sci Res Inst of ~~Project~~^{Planning} ~~at the~~ Gosplan USSR.
All-Union Order of Lenin Electrical Engineering Inst in V.I. Lenin),
150 copies (K1,45-58, 141)

-12-

Voprosy Magnitnoy Gidrodinamiki i Difraktsii Plazmy. Tzvy
Konferentsii po Magnitnoy Gidrodinamike, Riga, 2-3 Iyulya
1953 g. (Problems of Hydromagnetodynamics and Plasma Dy-
namics. Works of the Conference on Hydromagnetodynamics,
Riga, 2-10 July 1953), Riga, 1953, 359 pp

The majority of the texts of the 35 conference reports and discussions
published reports are presented in the source in abbreviated form. Previously pub-
lished reports are included there as brief abstracts only. The material
published there for the first time (abbreviated and unabbreviated) are as
follows:

"The Role of Hydromagnetodynamics and Plasma Dynamics in Certain
Problems of Astrophysics," by D. A. Frank-Kamenetskiy, Moscow, pp 1-11

"Hydromagnetodynamics and the Study of Variations of Cosmic Rays,"
by L. I. Dorman, Moscow, pp 13-14

"Cosmic Ray Spectra and Their Role in Cosmic Gas Dynamics," by S. I.
Svornitskiy, Moscow, pp 15-18

"The Influence of a Magnetic Field on the Stability of Flow of a
Conducting Fluid," by Ye. P. Velikhov, Moscow, pp 19-20

"Some Problems of the Motion of a Rarefied Plasma in a Magnetic Field,"
by Ya. P. Perelman, Moscow, pp 21-22

"On Nonlinear Steady-State Notions of a Rarefied Plasma in a Magnetic
Field," by R. L. Solov'ev, Moscow, pp 23-25

"On One Criterion of Applicability of the Equations of Hydromagnetody-
namics to a Plasma," by S. I. Rudnikitskiy, Moscow, pp 27-28 (Discussion
of the report by R. V. Polovin, ibid, pp 71-72)

"On the Possibility of Accelerating Charged Particles by Means of
Shock Waves in a Magnetized Plasma," by L. I. Dorman and G. L. Freylikh,
Moscow and Gor'kiy, pp 29-31

"On the Acceleration of Charged Particles During Powerful Impulse
Discharges and During the Collision of Magnetized Clouds," by L. I.
Dorman, Moscow, pp 33-38

"The Influence of a Longitudinal Magnetic Field on the Temperature of
the Electrons in a Plasma," by N. V. Kuvshinov, Tula, pp 39-42

"Investigation of Certain Characteristics of a Plasma of Xenon and
Argon Behind a Powerful Shock Wave," by S. R. Kiselev, Moscow, pp 53-55

"Observation of Electrodynamic Contractions of an Ion with the Aid of
an Electro-Optical Converter," by V. L. Ginzburg, V. A. Ginzburg, V. I.
Savitskiy, and G. G. Shostakovskiy, Moscow, pp 127-133

"On the Interaction of Weak Perturbations With Discontinuities and
the Stability of Shock Waves in Hydromagnetodynamics," by V. M. Kuvshinov
and E. M. Kov, pp 117-125

"On the Stability of Shock Waves in Hydromagnetodynamics," by S. I.
Svornitskiy, Moscow, pp 127-133

"On the Scattering of Hydromagnetic Waves on Turbulent Fluctuations,"
by A. G. Sitenko and Yu. A. Kirichenko, ibid, pp 133-142

"On the Damping of Hydromagnetic Waves in a Plasma," by R. L.
Solov'ev, Moscow, pp 147-149

"Simple Waves in Hydromagnetodynamics," by A. I. Akhiezer, G. Ya.
Lifshitskiy, and R. V. Polovin, ibid, pp 151-157

"Two-Dimensional Problems of Hydromagnetodynamics," by G. S. Golitsyn,
Moscow, pp 161-165

"On Wave-Induced Flows in Hydromagnetodynamics," by A. I. Ivchenko,
Moscow, pp 167-171

"Oscillations of an Infinite Gas Cylinder With Its Own Gravitation
in a Magnetic Field," by I. M. Yavorovskiy, Moscow, pp 171-183

"On Magnetic Boundary Layers and Electric Current Discharges in
Moving Media," by V. N. Zhigolev, Moscow, pp 185-190

TIME REVA G.D.

Тимофеев Г.Г.

TABLE I BOOK EXPLANATION

807/3762

Konferentsiya po magnitnoy gidrodinamike. Mge, 1958.

Voprosy magnitnoy gidrodinamiki i daniye plazmy; trudy Konferentsii. (Problems in Magnetohydrodynamics and Plasma Dynamics; Transactions of a Conference) Mge, 1st-vo M Leningrad, 1959. 345 p. Kuznetsov allip inserted. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Latvinyay GSN. Institut Fiziki.

Editorial Board: D.A. Frank-Kamenetskiy, Doctor of Physics and Mathematics, Professor; A.I. Vol'dukh, Doctor of Technical Sciences, Professor; I.M. Kirko, Doctor of Physics and Mathematics; V.Ya. Valuro, Candidate of Physics and Mathematics; V.O. Vitol, Candidate of Physics and Mathematics; Yu.M. Krut'niy, and V.Ya. Krutchenko.

Ed.: A. Tyopel'baum; Tech. Ed.: A. Klyuvaya

REMARKS: This book is intended for physicists working in the field of magnetohydrodynamics and plasma dynamics.

CONTENTS: This volume contains the transactions of a conference held in Mge, June 1958, on problems in applied and theoretical magnetohydrodynamics. The objects of the conference were the investigation of the basic theoretical and applied magnetohydrodynamics, establishing contact between the people doing research in different branches of magnetohydrodynamics, and promoting the participation of theoretical physicists in problems in applied magnetohydrodynamics. More than 160 persons from different parts of the Soviet Union took part in the conference, and 55 papers were read. Similar conferences are to be held regularly in the future; the next such conference is scheduled to be held in Mge in June 1960. In this present collection of the transactions of the conference, most of the papers and comments on papers are presented by the authors themselves in an abridged form. The book is divided into two parts: the first part deals with problems in applied magnetohydrodynamics and plasma dynamics, and consists of 35 articles on such subjects as the application of magnetohydrodynamics in astrophysics (D.A. Frank-Kamenetskiy), magnetohydrodynamics and the investigation of cosmic-ray variations (A.I. Buzinov), acceleration of plasma in a magnetic field (G.Y. Goryunov and A.I. Osipov), stability of shock waves and magnetohydrodynamics (A.I. Ablyayev). The second part, consisting of 35 articles, deals with problems of experimental magnetohydrodynamics, including the application of physical simulation for investigation of electromagnetic processes in liquid metals (I.M. Kirko) and the development of electromagnetic pumps (P.O. Kirillov); at the Institute of Physics of the Academy of Sciences, Latvian SSR. Several articles are devoted to induction heating, electromagnetic crucibles, electromagnetic stirrers for molten metals, and their application in the metallurgical industry including schematic diagrams of their power-supply systems. References are given at the end of most of the articles.

Buzinov, A.I. On Charged-Particle Acceleration During Powerful Turbulent Discharges and the Collision of Magnetized Clouds

63

Kozlov, M.Y. The Effect of Longitudinal Magnetic Fields on Electron Temperature in Plasma

65

Kolov, S.B. Research on Certain Characteristics of Plasma of Xenon and Argon Behind a Powerful Shock Wave

93

Gromovskiy, V.L., K.P. Ryndina, V.I. Serzhukin, and G.G. Timofeeva. Investigation of an Electrodynamically Finched Arc With the Aid of an Electron-Optical Converter

107

Ablyayev, A.I., G.Ya. Lyubarskiy, and R.V. Rabinovich. On the Stability of Shock Waves in Magnetohydrodynamics

116

Kontorovich, Y.M. On the Interaction of Small Disturbances With Discontinuities and the Stability of Shock Waves in Magnetohydrodynamics

117

Card 5/12

11

ACC NR: L 45979-66 EWT(1) IJP(c) AT
AP6028611

SOURCE CODE: UR/0057/66/036/008/1387/1393

AUTHOR: Baranov, V.Yu.; Musin, A.K.; Timofeyeva, G.G.

ORG: All-Union Electrotechnical Institute im. V.I. Lenin, Moscow (Vsesoyuznyy elektrotekhnicheskiy institut)

TITLE: Diffusive spread of a plasma condensation and the optimum length of a plasma accelerator

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 8, 1966, 1387-1393

TOPIC TAGS: plasma acceleration, plasma gun, plasma electron temperature, plasma velocity

ABSTRACT: Two of the authors have previously given a theory of the acceleration of plasmas in a rail accelerator, in which the effects of electrode erosion and diffusive scattering of the plasma particles were taken into account and from which it was concluded that there are optimal lengths of the plasma gun for maximum energy of the plasma, maximum momentum of the plasma, and maximum efficiency (V.Yu. Baranov and A.K. Musin, Radiotekhnika i elektronika, 9, No. 2, 283, 1964). This theory has been confirmed in part by experiments of A.D. Timofeyev, V.G. Marginin, B.A. Shevchuk, and A.A. Kalmykov (ZhTF, 35, No. 5, 858, 1965). The present paper reports experiments undertaken during 1960 and 1961 in order further to test this theory and to investigate factors that were not included in the theory. Plasmas were produced and accelerated by the 0.5 to 7 kV

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UDC: 533.9

ACC NR: L 45979-66
AP6028611

discharge of 110 uF capacitor in a coaxial or rail accelerator from 0.1 to 43.0 cm long. The electrode diameters in the coaxial accelerator were 1.0 and 3.3 cm, and the rail accelerator was so designed as to have the same inductance per unit length. In most of the experiments the pressure was kept below 10^{-3} mm Hg. The velocities of the plasmas were measured with the aid of two double probes, and their momenta were measured with a dynamic pendulum. High speed cinematograms and streak photographs were obtained of the plasmas in the rail accelerator. The results of the experiments were in qualitative agreement with the theory. The optimum length of the accelerator for maximum momentum was less than that for maximum kinetic energy. This is ascribed to the greater significance of the velocity for the energy than for the momentum. Motion of a portion of the plasma in the backward direction was detected and is ascribed to thermal expansion of the plasma. The backward momentum of the plasma decreased with increasing gas pressure (up to 10^{-2} mm Hg), whereas the forward momentum was almost independent of the pressure. This influence of the pressure on the backward momentum is ascribed to the cooling effect of the residual gas on the plasma electrons. It is concluded that there are optimum lengths of the plasma gun for maximum velocity of the plasma, maximum momentum of the plasma, and maximum efficiency of the conversion of electrical energy into kinetic energy of the plasma; that these optimum lengths are determined by the equilibrium between the acceleration process, friction, and diffuse scattering of the plasma; and that thermal expansion of the accelerated plasma in its center of mass system takes place and has a measurable influence on the characteristics of the accelerated plasma bursts. Orig. art. has: 10 figures.

SUB CODE: 20

SUBM DATE: 18Aug65

ORIG. REF: 006

OTH REF: 002

Card 2/2

JS

ACC NR: AP7000054

SOURCE CODE: UR/0207/66/000/005/0107/0112

AUTHOR: Baranov, V. Yu. (Moscow); Musin, A. K. (Moscow); Timofeyeva, G. G. (Moscow)

ORG: none

TITLE: Kinematics of the current-carrying layer in a plasma accelerator

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 5, 1966, 107-112

TOPIC TAGS: ^{accelerator} plasma, plasma acceleration, plasma ~~acceleration~~
~~charged particle~~, ~~plasma flow~~

ABSTRACT: The results of analytical and experimental investigations of the dependence of kinematic characteristics of quasi-neutral bunches of charged particles in "rail-type" accelerators on the electrical and geometric parameters of the accelerating circuit are compared. Proceeding from previous findings by one of the authors (A. K. Musin, Radiotekhnika i elektronika, v. 7, no. 10, 1962), the movement of a plasma bunch along the electrodes as a function of their erosion is described by an equation which can be approximately solved by an asymptotic method applicable to nonlinear oscillations with strong attenuation. The magnitudes characterizing the process of acceleration (current in the plasma, velocity of the current-carrying layer, momentum and mass of the bunch,

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ACC NR: AP7000054

and the energy transfer coefficient) can then be numerically determined and their behavior qualitatively described. The main features of the rail-type plasma accelerator used for experimental investigations of the kinematics of bunches are diagrammatically shown. Two parallel copper bars 2.5 cm wide, 0.15 cm thick, and 37 cm long served as guiding electrodes (rails). The distance between them could be varied between 0.5 and 5.5 cm. The plasma source was the discharge current from a 50—300 μ F condenser at 0.5 to 7 kv between the rails, initiated by the breakdown of a shot of gas introduced between the rails beginning. The pressure of residual gases in the accelerator did not exceed 10^{-4} mm Hg. The velocity of the bunches was determined by double probes between the guiding rails. The momentum of the bunches was measured by ballistic pendulums suspended at the end of the track. The measurement results, presented in a number of graphs, show the interrelationship of the characteristic parameters along with the analytical data. The main conclusions drawn from the investigation are: 1) that, in case of low erosion, the limit speed of the plasma is proportional to the initial electrical energy and the inductivity gradient of the accelerating circuit, and inversely proportional to the mass of gas moved with the current; in case of strong erosion, the speed of the plasma is a function mainly of the initial voltage of the condenser, since its own mass grows fast in the process, which greatly reduces the acceleration. 2) The end momentum of the bunch does not depend on the mass of gas, but

Card 2/3

ACC NR: AP7000054

is a linear function of the condenser capacitance, the inductivity gradient of the circuit, and the square of the initial voltage. 3) The energy transfer, in case of low erosion, is a linear function of the initial electrical energy and the square of the inductivity gradient. In case of high erosion, only the inductivity gradient remains effective, together with the initial voltage. Orig. art. has: 7 figures and 9 formulas. [WA-71]

SUB CODE: 20/ SUBM DATE: 190ct65/ ORIG REF: 005/ OTH REF: 001

Card 3/3

ACC NR: AP7004641

(N)

SOURCE CODE: UR/0288/66/000/003/0106/0107

AUTHOR: Neretina, N. A.; Timofeyeva, G. G.

ORG: All-Union Electrotechnical Institute im. Lenin, Moscow (Vsesoyuznyy elektrotekhnicheskii institut)

TITLE: Obtaining electron flux from an arc discharge plasma in the metal vapors

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1966, 106-107

TOPIC TAGS: electron radiation, electron flux, arc discharge, arc property, *PLASMA DISCHARGE*

ABSTRACT: An experimental investigation was made of the use of plasma arc discharges in metal vapors as electron power sources. The electron flux was created by a low-voltage arc which was excited between a cylindrical stainless steel anode on a cathode made of copper or tin. The gap between the anode and cathode was 3—5 mm. A system of accelerating electrodes consisting of four cylinders and an electron collector was positioned behind the anode in a connecting pipe whose axis was perpendicular to the anode. The pressure in the tube before the firing was 7×10^{-6} mm Hg and after several seconds of the burning of the arc the pressure increased up to 2×10^{-4} mm Hg. The arc was supplied from a rectifier with an operating voltage of 150 v. The currents of stable burning with the copper and tin cathode were 50 a and 30 a, respectively. The voltage drop across the arc was not higher than 20 v. An electron current of 20 ma was received on the collector with

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ACC NR: AP7004641

the copper cathode at a discharge current of 50 a and an accelerating voltage of 0.9 kv; with the tin cathode the electron current was 6.5 ma at a discharge current of 30a and an accelerating voltage of 0.45 kv. An experimental setup operating with mercury vapor and cooled by liquid nitrogen provides an electron current of 1.5 a with an accelerating voltage of 5 kv and a discharge current of 25 a. Orig. art. has: 1 figure. [GS]

SUB CODE: 09/ SUBM DATE: none/

KORSHAK, V.V.; PAVLOVA, S.A.; TIMOFEYeva, G.I.; VINOGRADOVA, S.V.;
PANKRATOV, V.A.

Effect of the method of preparation and of the size of the
side chain radical on the viscosometric properties of
polyarylates. Vysokom.soed. 7 no.10:1679-1683 0 '65.
(MIRA 18:11)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

TIMOFEYeva, G.I.; PAVLOVA, S.A.; KORSHAK, V.V.; Primala uchastiye: BRAGINA,
T.P., laborant

Effect of the method of synthesis on the structure of polyarylate
molecules based on 2,2-bis-(4-hydroxyphenyl)propane and isophthalic
acid. Vysokom.sped. 7 no.7:1208-1213 J1 '65.

(MIRA 18:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

TIMOFEYEVA, G.I.; PAVLOVA, S.A.; KORSHAK, V.V.

Effect of the method of preparation and the size of the side chain radical on the molecular weight distribution of polyarylates. Vysokom. soed. 7 no.8:1436-1441 Ag '65. (MIRA 18:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

TIMOFEYEVA, G.I.; DUBROVINA, L.V.; KORSHAK, V.V.; PAVLOVA, S.A.

Viscosimetric properties of polyarylates. Vysokom. soed. 6
no.11:2008-2010 N 164 (MIRA 18:2)

Molecular weight distribution of polyarylates. Ibid.:2011-2014

1. Institut elementoorganicheskikh soedineniy AN SSSR.

KORSHAK, V.V.; PAVLOVA, S.A.; TIMOFEEVA, G.I.; VINOGRADOVA, S.V.; VANKRATOV, V.A.

Influence of the steric factor on the viscosimetric properties and polydispersity of polyarylates. Dokl. AN SSSR 160 no.1:119-122
Ja '65. (MIRA 18:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Korshak).

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A001/A001

3.1720 {¹¹²⁷
 ¹¹⁷²
 ¹⁰⁴¹

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, No. 3,
p. 39, # 1946

AUTHORS: Kaydanovskiy, N. L., Ikhsanova, V. N., Soboleva, N. S., Timofeyeva,
G. M., Gel'freykh, G. B.

TITLE: A Great Burst of ¹²Solar Radio-Frequency Radiation of March 3, 1958

PERIODICAL: Solnechnyye dannyye, 1958, No. 3, pp. 72-75

TEXT: The authors present the results of observations of radio-frequency radiation burst at a wavelength of 3.2 cm. Observations were carried out at the Pulkovo Observatory simultaneously with a polarization radiometer and the great Pulkovo radiotelescope. The burst was connected with a visual flare of Class 3 and radio bursts at frequencies of 208, 60 and 178 Mc. The maximum flux from the burst was 10 times higher than the flux from a quiet Sun. The degree of circular polarization, being equal to 7%, remained unchanged during the burst. The angular dimensions of the active formation which gave rise to the burst were $\approx 1'.5$. Effective temperature $\sim 10^{8.0}$ K. The difference in the coordinates of

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A001/A001

A Great Burst of Solar Radio-Frequency Radiation of March 3, 1958.

the burst and visual flare made it possible to determine that the altitude of the burst over the photosphere amounted to $0.1 R_{\odot}$. There are 8 references.

N. S. Soboleva

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

SOBOLEVA, N.S.; TIMOFEYEVA, G.M.

Distribution of polarized radio emission in the Cygnus-A
source according to observations at Pulkovo. Dokl. AN SSSR
153 no.3:555-558 N '63. (MIRA 17:1)

1. Glavnaya astronomicheskaya observatoriya AN SSSR. Pred-
stavleno akademikom V.A. Kotel'nikovym.

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9"

KOROL'KOV, D.V.; TIMOFEYEV, G.M.

Gain distribution in a radiometer. Izv. GAO 23 no.3:191-193 '64.

Ferrite and diode modulators for radiometer. Ibid.:236-237
(MIRA 17:11)

TIMOFEEVA, S. M.

KOROLKOV, D.V., PARTYSKIY, YU.N., TIMOFEEVA, G.M., KHAYKIN, S.E.

High Resolution Radio Observations of Venus and Jupiter at the
Pulkovo Observatory.

Report to be submitted for the 4th International Space Science Symposium
(COSPAR) Warsaw, 2-12 June 63

KOROL'KOV, D.V.; PARIYSKIY, Yu.N.; TIMOFEYEVA, G.M.; KHAYKIN, S.E.

High-resolution radio-astronomical observations of Venus.
Dokl.AN SSSR 149 no.1:65-67 Mr '63. (MIRA 16:2)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.
Predstavleno akademikom V.A.Kotel'nikovym.
(Radio astronomy) (Venus (Planet))

GRECHUKHINA, O.A.; TIMOFEYeva, G.P.

Effect of foliar feeding of plants on the absorption of mineral
nutrients by the root system. Vest. LGU 16 no.3:36-45 '61.
(MIRA 14:2)

(Plants—Nutrition)

82566

S/123/60/000/009/002/017

AOO4/AOO1

18.1110

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1960, No. 9, p. 20,
43233

AUTHORS: Rakhshtadt, A.G., Meshcherinova, O.N., Zelenskiy, G.K., Timofeyeva,
G.S.

TITLE: Investigating the Properties and Heat Treatment of Boron-Alloyed
Spring Steels ✓

PERIODICAL: V sb.: Metallovedeniye i term. obrabotka. ("Stal", 1958,
Prilozh.), Moscow, 1959, pp. 93-126

TEXT: The authors give an account of the investigation results of the effect of boron (0.0017 - 0.005%) and heat-treatment conditions on the mechanical properties of the spring steel grades 50X (50Kh), 50XΦA (50KhFA), 55XГ (55KhG), 55XГC (55KhGS), 55CГ 2 (55SG2), 55C 2 (55S2) and 60C 2 (60S2). It is shown that small boron additions (approximately 0.003%) have a positive effect on the technological and mechanical properties of the steel grades investigated. Boron does not essentially change the granularity of austenite during heating up to 1,050°C (if the steel is preliminarily reduced with aluminum and titanium). The

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S/123/60/000/009/002/017
A004/A001

Investigating the Properties and Heat Treatment of Boron-Alloyed Spring Steels

strongest effect of boron on the tempering ability can be observed with the chrome-
manganese, 55ХГР (55KhGR), and silicon-manganese, 55СГ2Р (55SG2R), steel grades. ✓
Steel grades with boron possess a somewhat higher E at all annealing temperatures,
a higher fatigue strength and higher ductility and toughness values after iso-
thermal hardening.

Translator's note: This is the full translation of the original Russian
abstract.

Card 2/2

BARONENKO, V.A.; TIMOFEYeva, K.F.

Effect of high-frequency and ultrahigh-frequency fields on conditioned reflex activity and some unconditioned functions in animals and man.
Fiziol.ghur. 45 no.2:203-207 F '59. (MIRA 12:3)

1. From the Institute of Occupational Hazards Control, Leningrad.
(ELECTRICITY, effects,
high & ultrahigh frequency fields, on conditioned &
unconditioned reflexes (Rus))
(REFLEX, CONDITIONED,
eff. of high & ultrahigh frequency electric fields (Rus))
(REFLEX,
unconditioned, eff. of high & ultrahigh frequency
electric fields (Rus))

AUTHORS: Granovskiy, V. L., Ryumina, K. P., SOV/56-35-1-5/59
Savoskin, V. I., Timofeyeva, G. G.

TITLE: Observations of the Pinch Effect During a Decrease of
Amperage (Nablyudeniya pinch-effekta pri umen'shayushchey
sile toka)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol. 35, Nr 1, pp. 45 - 49 (USSR)

ABSTRACT: The influence of the plasma's own magnetic field upon
the plasma column has already been investigated by various
authors (Refs 1-5); in some cases this was done in the
case of increasing amperage (e.g. Ref 4). In the present
paper the authors describe investigations of plasma deformations
in the case of decreasing amperage in discharge tubes
of 10 and 32 mm diameter in hydrogen- or mercury vapor
at from 10^{-3} to 10^{-2} torr, at current pulses of ~ 300
microseconds and amplitudes of from 1.3 to 5.5 kA (300 μ F,
1-3 kV). For photorecording an electron-optical trans-
former (type PIM-3, developed by M.M. Butlerov) was used.
Photographs are given of a number of contracted, bent, or

Card 1/2

Observations of the Pinch Effect During a Decrease of Amperage SOV/56-35-1-5/59

kinked plasma filaments. It was found that for $di/dt < 0$ such electrodynamic deformations occur, which vanish again at points of high gas density (i.e. according to experimental conditions near the cathode or near the anode). Exposure in each case lasted 1,5 microseconds. There are 3 figures, 1 table, and 6 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut (All-Union Institute of Electrical Engineering)

SUBMITTED: February 12, 1958

Card 2/2

Timofeyeva, G. M.
GELFREICH, G., IKHSANOVA, V. N., KAYDANOVSKIY, N. L., SOBOLEVA, N. S., TIMOFEYeva, G. M.,
and UMETSKIY, V. N.

"Bursts of Microwave Radioemission Associated with Solar Flares."

paper presented at Symposium on Radio Astronomy, Paris, 30 Jul - 6 Aug 58.

BASS, S.I.; Prinimala uchastiye: TIMOFEYeva, G.V.

Use of tert-butyl hydroperoxide for the quantitative determination
of tri-n-butyl- and triphenyl phosphites. Zhur.anal.khim. 17
no.1:113-116 Ja-F '62. (MIRA 15:2)

1. M.V.Lomonosov Moscow Institute of Fine Chemical Technology.
(Phosphorus organic compounds)

KIRCHEVSKAYA, I.Yu.; VOLKOV, L.A.; TIMOFFEYVA, G.V.; MEDVEDEV, S.S., akademik

Stationary and nonstationary processes of butadiene polymerization
catalyzed by the system $R_2AlCl - CoCl_2(Py)_2$. Dokl. AN SSSR 163 no.2:
375-378 J1 '65. (MIRA 18:7)

1. Mskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.
Lomonosova.

SANKIN, Nikolay Mikhaylovich; TRUNOV, Vadim Ivanovich. Prinimali uchastiye:
TIMOFEYeva, G.Ya.; KHANOV, B.A.; SAVITSKIY, B.I.. BORISOV, G.B.,
otv.red.; VORONOVA, A.I., red.; MARKOCH, K.G., tekhn.red.

[Principles of technical planning of transmitting networks for
television and shortwave F.M.broadcasting; information manual]
Printsipy tekhnicheskogo planirovaniia peredaiushchikh setei
televizionnogo i UKV ChM veshchaniia; informatsionnyi sbornik.
Moskva, Gos.izd-vo lit-ry po voprosam svyazi i radio, 1960.
93 p. (MIRA 13:5)

1. Nauchno-issledovatel'skiy institut svyazi Ministerstva svyazi
SSSR (for Sankin, Trunov).
(Radio, Shortwave---Transmitters and transmission)
(Television broadcasting)

COMMON ELEMENTS																										PROCESSES AND PROPERTIES INDEX																										21																									
1ST AND 2ND ORDERS																										1ST AND 2ND ORDERS																										1ST AND 2ND ORDERS																									
<p>Low-temperature carbonization of Chelyabinsk coal. Rapoport and I. Timofeeva. <i>Khim. Tverdogo Topliva</i> 447-54(1933); cf. preceding abstr. -Chelyabinsk brown coal analyzed: H₂O 20.01, ash 15.47, total S 1.07, C 48.34, H 3.47, volatile matter 25.57% and heating value 2906 cal. Low-temp. carbonization yielded: semicoke 67.83, anhyd. tar 6.61, tar water 18.52, H₂O of decompn. 6.21, gas and losses 7.04%. The gas contained: H₂S + CO, 34.6, C₂H₄ 2.7, CO 14.1, H 14.8, CH₄ 21.3, C₂H₆ 3.7 and N (by difference) 8.8%. The tar, sp. gr. 1.018, contained phenols 31.40, bases 2.10, acids 0.00%; it had an η_{sp} viscosity of 0.36, Brecken flash 82°, S (lamp method) 0.57, paraffin (Holde) 1.10%. The gasoline had a sp. gr. of 0.8207, S 1.12% (lamp method), I no. 112.2, and yield up to 175° 8.23%. The gas gasoline, which amounted to 0.35% of the coal, had a sp. gr. of 0.7830, S 0.77 and I no. 120.1. The semicoke had ash 27.35, total S 1.40, C 60.38, H 2.78, volatile matter 14.90% and heating value 5541 cal. A. A. B.</p>																																																																													
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																																													
<p>1ST AND 2ND ORDERS</p>																																																																													

Experimental Study of the

Experimental study of the interaction of the
microbe by *Staphylococcus aureus* (Anab. 113)
(Gram. pos., Rod. parva, 1 spore, 10⁸ spores/ml)
(10⁸ spores/ml)

1. Identification of the microbe by the
Gram stain and other characteristics (Gram. pos.,
Rod. parva, 1 spore, 10⁸ spores/ml).

TIMOFEEVA, I.

I. RAPOPORT, Khim. Tverdogo Topliva 4, 5/4-9, 1933

S/135/61/000/004/003/012
A006/A101

AUTHORS: Zgonnik, V.M., Engineer, Kakuyevitskiy, V. A., Candidate of Technical Sciences, Silkin, A. S., and Timofeyeva, I. I., Engineers

TITLE: Reconditioning of Carburized Parts by Electric-Pulse Building-Up

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 4, pp. 15 - 17

TEXT: Electric-pulse (vibro-arc) building-up in a liquid jet came into extended use for the reconditioning of worn-out parts. However, nonuniform hardness of built-up surfaces and considerable reduction of fatigue strength restrict the effectiveness of the method. The Ukrainian dorozhno-transportnyy nauchno-issledovatel'skiy institut (Scientific Research Institute of Roads and Transportation) together with the Kiyev avtoremontnyy zavod No. 1 (Automobile Repair Plant No. 1) carried out an investigation to select the proper technological variant for repairing a Cardan shaft crosspiece by electric-pulse building-up assuring the necessary service properties of the part. The following technology was employed: grinding of the cross-pieces for building up to 21.4^{+0.1} mm diameter; building up to 23 - 23.5 mm diameter; grinding to rated dimensions (22^{+0.008} mm). The thickness of the built-up layer after mechanical treatment was 0.3 - 0.35 mm. Build-

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Reconditioning of Carburized Parts by Electric-Pulse Building-Up

ing-up was performed on the YAHЖ-5 (UANZh-5) machine with OBC (OVS) wire of 1.6 mm in diameter under the following conditions: 140 - 150 amp current; 12 v arc voltage; 1.1 m/min electrode feed rate; building - up pace : 1.7 mm/rev; rotation speed of part - 11 rmp; inductance - 4 PCTЭ -34 (RSTE-34) coils. The consumption of the cooling liquid (Q) varied from 0.1 to 0.6 l/min. A chemical analysis of the built-up parts showed that when building up with OVS wire under the aforementioned conditions cracks appeared at $Q > 0.25$ l/min; at $Q = 0.3$ l/min cracks formed systematically. The location of the cracks indicate that they were caused by tensile tangential residual stresses, formed on the external surface as a result of building-up process. The authors determined residual stresses on pins cut off the cross pieces using the Zaks method. The specimens were drilled from 8 to 16 mm, then bored out to 19 mm. The residual stresses were determined by consecutive grinding of the specimens along the external diameter to 0.25 mm depth. The nature of changes and magnitude of residual stresses in the remaining section was determined by interpolation from the equilibrium condition, i.e., the equivalence of the sum of positive and negative surfaces of the graph of residual stresses (Fig. 5). The experimental investigation yielded the following results: When

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A006/A101

Reconditioning of Carburized Parts by Electric-Pulse Building-Up

building-up worn out carburized steel parts under conventional conditions, the microhardness of the built-up metal is non-uniform and varies within 330 - 750 kg/mm² depending on the consumption of the cooling liquid. Burning-out of carbon during the building-up process decreases with a higher consumption of the cooling liquid. Minimum carbon content in the built-up layer at $Q = 0.1$ l/min is 0.56%. As a result of non-uniform heating of the part built-up by electric pulse process a redistribution of residual tangential stresses over the section takes place. In the built-up layer residual tensile stresses arise which amount to 7.5 - 42.5 kg/mm² depending on the consumption of the cooling liquid. At $Q > 0.25$ l/min these stresses exceed the ultimate strength of the built-up layer. This causes the formation of cracks passing into the base metal. Minimum residual stresses were observed when building-up with $Q = 0.1$ l/min; in this case cracks were not revealed. Heat treatment (quenching, or carburizing and quenching) of the part built up with small amounts of the cooling liquid considerably increases the magnitude and stability of hardness and entails satisfactory redistribution of residual stresses over the section. This promotes an increase of fatigue strength of the parts. For reconditioning of parts with a high strength reserve, subjected during operation to static load and low wear, it is recommended to use electric-

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A006/A101

Reconditioning of Carburized Parts by Electric-Pulse Building-Up

-pulse building up at $Q < 0.1$ l/min without subsequent heat treatment. The repair of parts with low strength reserve operating under variable load and considerable wear, can be effectively performed by building-up with low consumption of cooling liquid and subsequent heat treatment, i.e., carburizing with quenching and low-temperature tempering. (heating to 800°C , for 20 min. cooling in water, tempering at $180 - 200^{\circ}\text{C}$ for 1 h). A control of parts built-up by the described technology showed high wear resistance of the pins and sufficient fatigue strength of the parts. There are 7 figures and 4 Soviet references

ASSOCIATION: Ukrdorstrensni

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S/135/61/000/004/003/012
A006/A101

Reconditioning of Carburized Parts by Electric-Pulse Building-Up

Figure 1:

Dependence of changes in the carbon content in building-up process on the consumption of cooling liquid

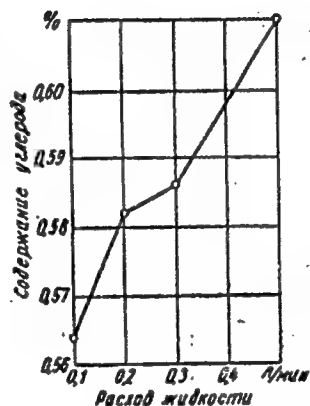
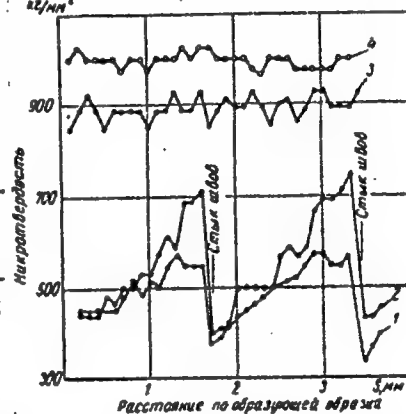


Рис. 1. Зависимость изменения содержания углерода в наплавке от расхода охлаждающей жидкости.

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Figure 2:

Microhardness of built-up layers at: 1 - $Q = 1$ l/min; 2 - $Q = 0.5$ l/min; 3 - $Q = 0.1$ l/min and quenching; 4 - $Q = 0.1$ l/min and carburizing with quenching

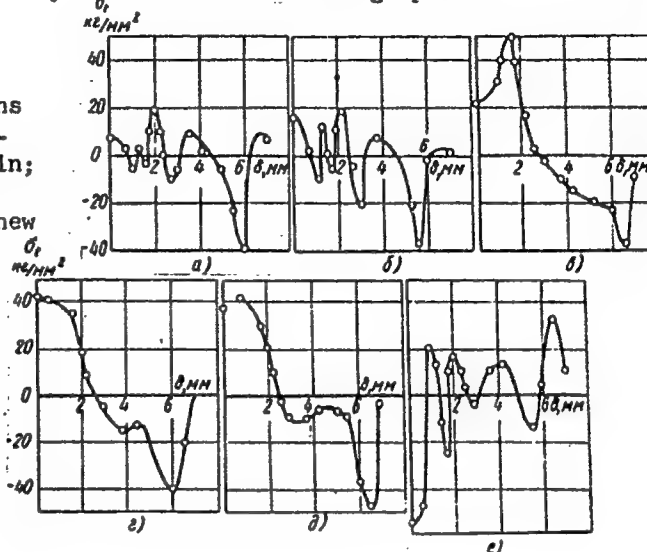


S/135/61/000/004/003/012
A006/A101

Reconditioning of Carburized Parts by Electro-Pulse Building-Up

Figure 5:

Residual stresses in built-up pins of a Cardan shaft cross-piece a - $Q = 0.1$ l/min; b - $Q = 0.15$ l/min; c - $Q = 0.2$ l/min; d - $Q = 0.25$ l/min; e - $Q = 0.3$ l/min; f - new cross piece.



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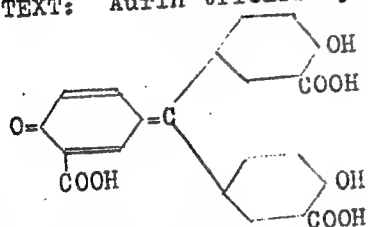
ZGONNIK, V.M., inzh.; KAKUYEVITSKIY, V.A., kand.tekhn.nauk; SILKIN, A.S., inzh.;
TIMOFEYEVA, I.I., inzh.

Reconditioning of cemented parts by multiple-impulse built-up welding.
Svar. proizv. no.4:15-17 Ap '61. (MIRA 14:3)

1. Ukrainskiy dorozhno-transportnyy nauchno-issledovatel'skiy institut.
(Electric welding) (Machinery—Maintenance and repair)

S/079/60/030/04/63/080
B001/B011

AUTHORS: Adamovich, L. P., Timofeyeva, I. I., Yutsis, B. V.
TITLE: Aurin Tricarboxylic Acid and Its Reaction With Beryllium Salts
PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 4, pp. 1325-1334
TEXT: Aurin tricarboxylic acid



had been first suggested as an analytic reagent in 1925 (Ref. 1). It is simply synthesized (Ref. 2) from easily available compounds, and is fairly often used in the form of ammonium salt, under the name of "Aluminon", as a reagent on

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Aurin Tricarboxylic Acid and Its Reaction With
Beryllium Salts

S/079/60/030/04/63/080
B001/B011

aluminum (Ref. 3), some rare elements (Ref. 4), beryllium (Ref. 5), et al. Nonetheless, this acid in itself, as well as its reaction with metals, is insufficiently investigated (Refs. 6-9). A. Babko (Ref. 7) suggested a composition of the aluminum complex 1 : 1 formed, according to his diagram (this composition was confirmed by L. Molot, L. Kul'berg (Ref. 8)) without giving the lability constant. Recently, L. Serdyuk and collaborators (Ref. 9) reported on the presence of two beryllium-aluminum complexes with the composition 1 : 1 (at pH 5) and 3 : 1 (at pH 7). No demonstration was given, nor data concerning the properties of the reagent. This problem therefore requires an investigation to be made, first of all, on the acid itself. The authors studied the behavior of the acid in the pH-range 4-14, and calculated the constants of acid dissociation, as well as the coefficients of the molar light absorption at $\lambda 520 \text{ m}\mu$ for the anions. Mention is made of the weakening of coloration of fresh alkali solutions of the dye in the course of time. In the pH-range 4-6, the formation of only one complex with the acid in the ratio 1 : 1 is observed in a fairly wide range of beryllium concentrations. The structure of this complex was defined. In the pH-range 13-14 a reaction of beryllium with the dye is likewise observed; this process was not investigated further. The complex arising in the acid region can be made use of for objective photometric de-

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Aurin Tricarboxylic Acid and Its Reaction With
Beryllium Salts

S/079/60/030/04/63/080
B001/B011

terminations at pH 4.3, as well as for visual ones at pH 6-7. Papers by
I. S. Ioffe (Ref.11) and N. P. Komar' (Ref. 14) are also mentioned. There
are 5 figures, 3 tables, and 20 references, 11 of which are Soviet. 15

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State
University)

SUBMITTED: March 12, 1959

Card 3/3

262T48

TIMOFEYEVA, I. L.

USSR/Geology - Carboniferous

Jul/Aug 53

"The Middle Carboniferous in Dzhungaria Ala-Tau,"
O. L. Eynor

Iz Ak Nauk SSSR, Ser Geol, No 4, pp 119-124

States that the stratigraphy of the Upper Paleozoic of Dzhungarskiy Ala-Tau is still not well developed. Diagram shows the cross section of a layer over 530 m thick. States that one of the better cross sections of the Upper Paleozoic which contains a very rich complex of fauna is intersected by the Naryn and Dzhaman-Bulak rivers along the southern slope of the range. Recent studies by I. I. Gorskiy and I. L. Timofeyeva reveal the same fauna for the Upper Carboniferous.

262T48

TIMOFEEVA, I. I.

Dissertation: "Tertiary Ethylene Glycerines and Their Dehydration." Cand Chem Sci,
Inst of Organic Chemistry imeni N. D. Zelinskiy, 3 Jun 54. Vechernyaya Moskva,
Moscow, 25 May 54.

SO: SUM 284, 26 Nov 1954

TIMOFEYEVA, I. M.

6280. Timofeyeva, I. M. Tretichnyye etilenovyye glitseriny i ikh
degidratatsiya. [M.,] 1954. 16s. 22sm. (Akad. nauk. SSSR. otd-niye
khim. nauk. In-t organich. khimii). 100 ekz. B. Ts. [54-58176]

SO: Knizhamya Letopis' 1, 1955

NIKITIN, V.I.; TIMOFEEVA, I.M.

Tertiary triatomic alcohols of the acetylenic series and their conversions. Part 7. Hydrogenation of 2,3,6-trimethylheptyne-4-triol-2,3,6, 3,4,7-trimethyloctyne-5-triol-3,4,7, 2-methyl-5-(1-oxycyclohexyl)-hexene-3-diol-2,5, and 2,4-di(1-oxycyclohexyl)-butyne-3-ol-2. Zhur.ob.khim.25 no.7:1334-1343 J1'55.

(MLRA 8:12)

1. Institut khimii Akademii nauk Tadzhikskoy SSR.
(Alcohols) (Hydrogenation)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9"

E-2

USSR/Organic Chemistry. Synthetic Organic Chemistry.
 Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26685.

Author : Nikitin, V.I.; Timofeyeva, I.M.
 Inst : Tertiary Triatomic Alcohols of Acetylene
 Title : Series and Their Conversions. X. Oxidation
 by Potassium Permanganate of Triols of Ethyl-
 ene Series: 2,3,6-trimethylheptene-4-triol-
 2,3,6, 3,4,7-trimethyloctene-5-triol-3,4,7,
 2,5-dimethyl-5-(1-oxycyclohexyl)-pentene-
 3-diol-2,5 and 2,4-di-(1-oxycyclohexyl)-
 butene-3-ol-2.

Orig Pub : Zh. obshsch. khimii, 1956, 26, No. 8, 2175 -
 2180.

Abstract : The oxidation by KMnO_4 of tertiary ethylene
 glycerins (EG) 2,3,6-trimethylheptene-4-
 triol-2,3,6 (I), 3,4,7-trimethyloctene-5-

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oxide (COOH)₂ (VII) as a
 (IX) 2,4-dinitrophenylate.
 V, VI - traces, 1.8 g of VII and

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APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755720014-9"

Distri: uELj/LE3d/uE2c/

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78255
SOV/79-30-3-9/69

AUTHORS: Nikitin, V. I., Savranskaya, S. D., Timofeyeva, I. M.

TITLE: Tertiary Triatomic Acetylenic Alcohols and Their Transformations. XVIII. Oxidation of Acetylenic and Ethylenic Glycerols With Potassium Permanganate

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 764-770 (USSR)

ABSTRACT: The authors reported previously (this journal, 1953, Vol 23, p 1330; *ibid.*, 1956, Vol 26, p 2175) that the oxidation of ethylenic glycerols with KMnO_4 involves chiefly the cleavage of single bonds adjoining the multiple bond and that comparatively large amounts of oxalic acid are formed in this reaction. On oxidation of acetylenic glycerols, however, the cleavage occurs at the triple bond and is accompanied chiefly by the formation of hydroxy acids. The above was investigated in detail in the oxidation with KMnO_4 of four acetylenic

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